

# Topics for Today



- Intro - Dr. Nolen
- Goals of public health data systems - Jason
- Where does public health currently get its data?  
-Jason
- How does public health use and disseminate data?  
-Keegan
- Using systems for multiple health issues - Keegan
- Future data collection - Jason
- Future public health data use - Keegan
- Pandemic lessons and goals for the future - Dr. Nolen

## Overview of COVID-19 Surveillance

Data are updated on business days at approximately 1:00 pm. Data are not updated on weekends and official holidays. Most of the tables, charts, and maps in this report are interactive. Tables can be sorted by clicking on column headings, etc. using the mouse cursor and data will appear when hovering or clicking the mouse cursor. Controls will appear at the top right corner of charts when the mouse cursor is placed on the chart. For response goals and operating metrics used to create the charts on this dashboard are also available for [download](#). Case and laboratory data that can be queried is available on [IBIS](#).

Report Date: **March 02, 2022.**

**923,591**

COVID-19 Cases


**4,937,314**

People Tested\*


**9,246,945**

Tests Reported


**33,326**

COVID-19 Hospitalizations

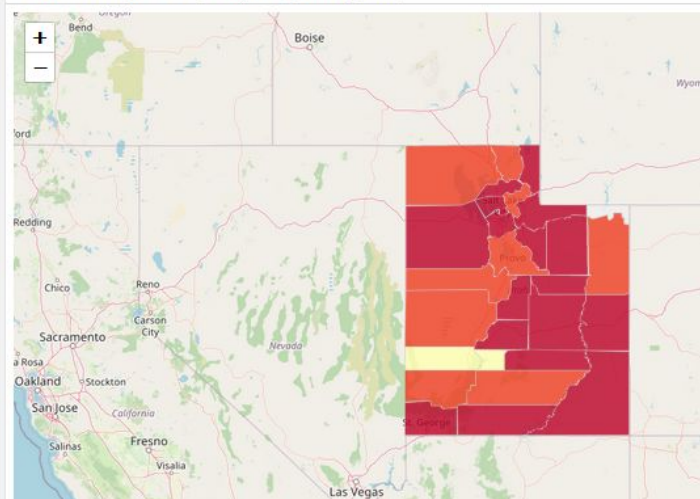

**4,436**

COVID-19 Deaths

Total Number of Lab-Confirmed COVID-19 Cases in Utah Residents

Jurisdiction	Cases	Hospitalizations	Deaths
Bear River	51293	1991	225
Central Utah	20581	913	157
Davis County	99689	2906	375
San Juan	3946	229	47
Salt Lake County	339395	13949	1549
Southeast Utah	9960	286	73
Southwest Utah	63162	3007	594
Summit County	13350	264	22
Tooele County	21223	665	93
TriCounty	12649	1090	96
Utah County	200759	5085	749
Wasatch County	10634	174	33

COVID-19 14-Day Case Rate per 100,000 Population by County



# Utah Data



## Utah reports 278 COVID cases Tuesday; 8 more deaths



Photo by AP

### RESOURCES

- Symptom Checker
- Utah Dept. of Health Updates
- Interactive COVID-19 Map
- Unemployment Assistance
- Small Business Resources
- Hotline: 1-800-456-7707



The Salt Lake Tribune

## Utah's number of new COVID-19 cases remains relatively low, but people keep dying

The state reports 11 more deaths, bringing the state total to more than 4,400.



CORONAVIRUS UTAH

## Utah reports 461 COVID cases, 19 additional deaths

Mar 2, 2022, 1:27 PM

# Utah Data



Recognized as high quality across the country

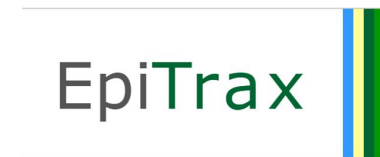
- CDC Center for State, Tribal, Local, and Territorial Support meeting as a national best practice
- Council of State and Territorial Epidemiologist examples for other states
- CDC eSHARE -webinar on how to implement NNDSS HL7 case notifications and other HL7 effort
- Mentioned in national media as exceptional data
- 29 publications on the pandemic



# Data Collection



- Electronic Lab Reports (ELR)
  - Laboratory reporters
  - Clinical providers
  - Non-traditional reporters
  - Inter-state data transfers
- Electronic Case Reports (eCR)
  - Direct report from EMR
  - Clinic visits and hospitalizations
- Centralized Disease Surveillance System (EpiTrax)
  - Case Investigations
  - Contact Tracing
  - ACTS
  - Outbreak Management
- Syndromic Surveillance (SyS)
- Waste water surveillance
- Whole Genome Sequencing
- Linked to vaccine and mortality data
- UHRMS



# Data Partners



- Promoting Interoperability
  - ELR, eCR, USIIS, SyS, Cancer Registry
- Partners
  - Clinical Health Providers
  - Private Sector (NOMI, Google/Apple)
  - Local Health Departments
  - Tribal Health Jurisdictions
  - Utah Citizens
  - UHIN
  - APHL
  - CDC
  - CSTE
  - NACCHO
  - EpiTrax Consortium





## Challenges

- Pull, clean, and analyze new datasets
  - Data and code management
  - Privacy and Security
- **Interpretation:** presenting data in transparent, reproducible, digestible, and actionable ways
- **Dissemination:** getting the right data to the right people at the right time





TOM SZCZARBOWSKI/GETTY IMAGES

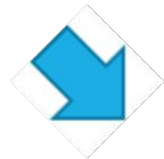


# On-Ramps



Eden  
Electronic Death Entry Network

EpiTrax



UHRMS



Central  
Surveillance  
Team

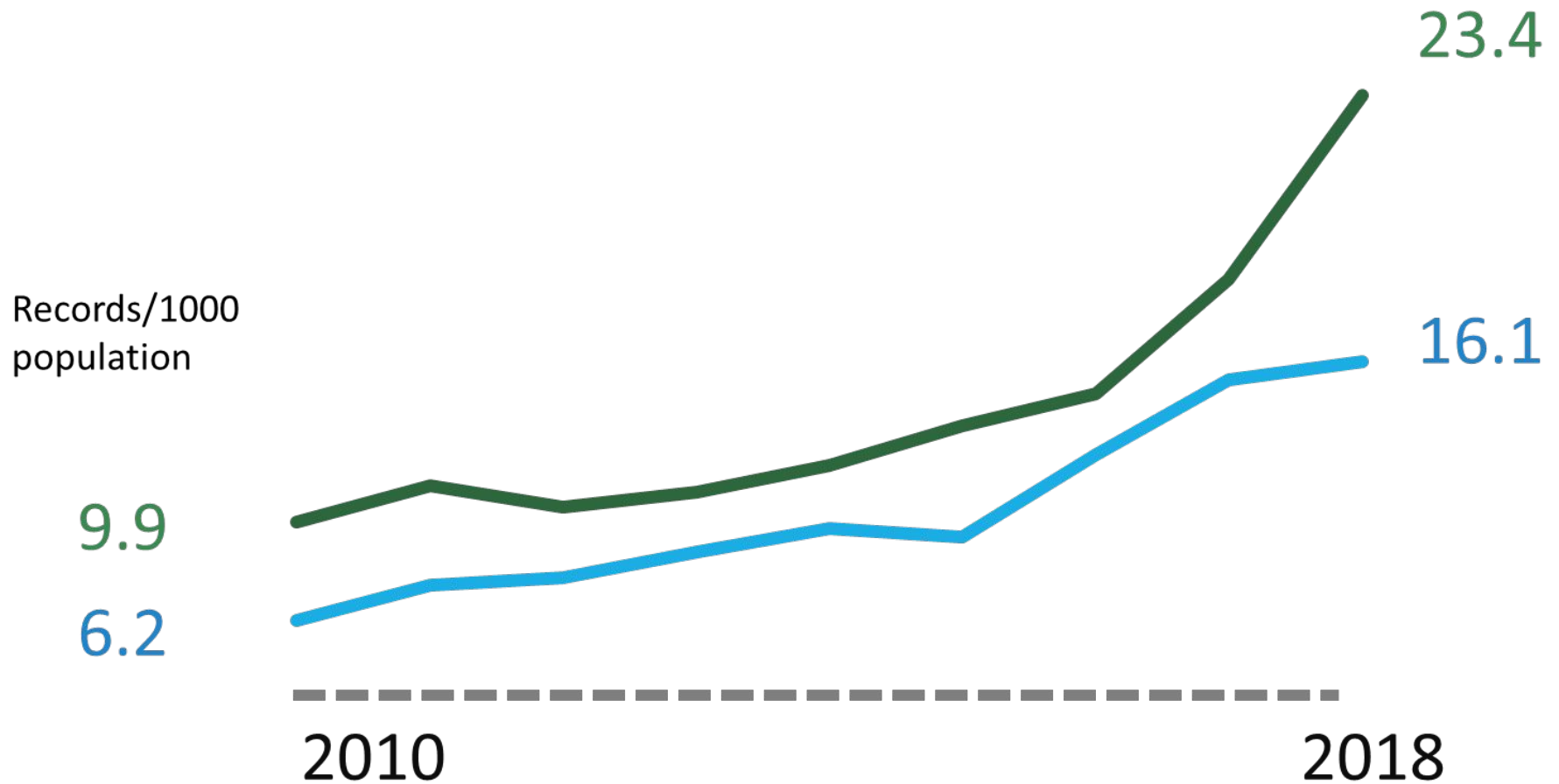


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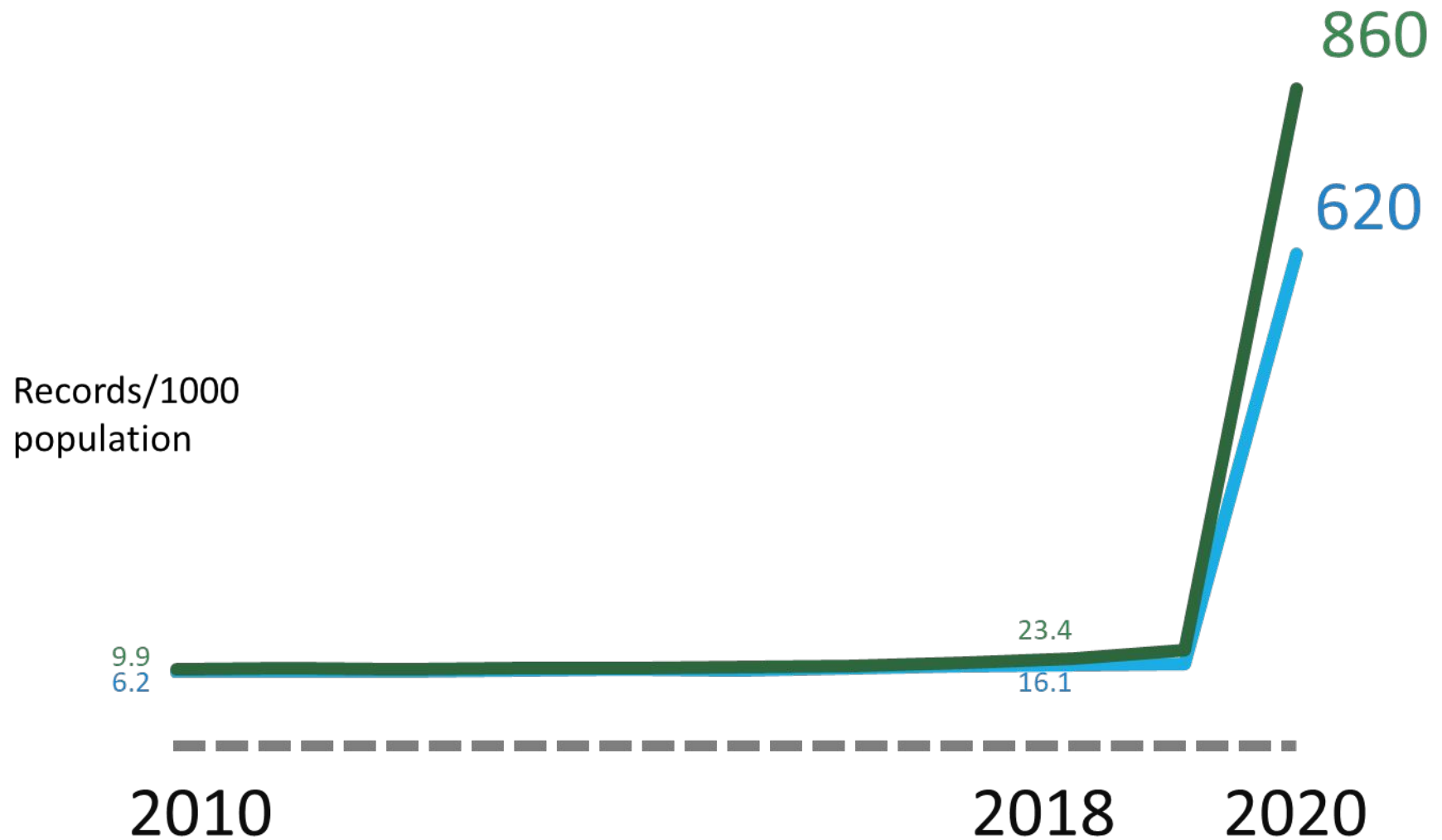
# Thrift Data



## Reportable disease case and laboratory report rates



# Reportable disease case and laboratory report rates



# On the Highway



- Clean
  - Consistently
  - Transparently
- Analyze
  - Who, where, when, how, and so what?
    - Trends in disease
    - New outbreaks
    - Changes in presentation, severity, or intervention effectiveness
    - At-risk communities and social determinants of health

# Central Data Hub



Eden  
Electronic Death Entry Network



EpiTrax

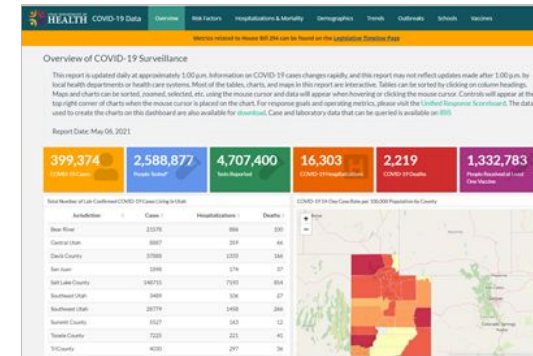
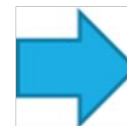
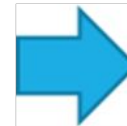
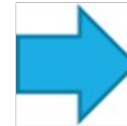


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# Central Data Hub






# Lessons Learned



- Extremely high value of partnerships
- Data systems
  - Many systems already in place
  - Chronic underfunding
  - Scalability is important
  - Need for more automated systems and processes
  - Interoperability both within state and across states
- Public Trust
  - Understand data
  - Act on recommendations

# To the Future



- Continuous evolution of systems
- Automation
- Centralized data systems
- Cloud migration/cloud native
- Data Modernization Initiative (DMI)
- National Data Standards
-  HL7 FHIR
- SANER
- UHIN FHIR Connection
- eCR expansion
- Data Warehouse
- Data accessibility to local health departments

# To the Future



- Utilize tools built for COVID-19 for other conditions
- Utilize ECR for clinical data - more rapidly understand changes in severity
- Leverage WGS to better understand/respond to transmission events
- Maintain COVID-19 surveillance to know when we need to ramp back up
- Coordinate analytics through SDH lense